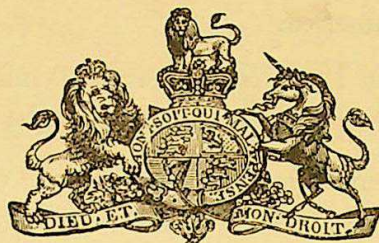


RECORDED



A.D. 1873, 17th MARCH. N° 980.

Cheese.

LETTERS PATENT to George Tomlinson Bousfield, of Sutton, in the County of Surrey, for the Invention of "IMPROVEMENTS IN THE MANUFACTURE OF CHEESE."—A communication from abroad by Henry Ogden Freeman, of Sherburne, in the State of New York, United States of America.

Sealed the 9th May 1873, and dated the 17th March 1873.

COMPLETE SPECIFICATION filed by the said George Tomlinson Bousfield at the Office of the Commissioners of Patents, with his Petition and Declaration, on the 17th March 1873, pursuant to the 9th Section of the Patent Law Amendment Act, 1852.

5 TO ALL TO WHOM THESE PRESENTS SHALL COME, I, GEORGE TOMLINSON BOUSFIELD, of Sutton, in the County of Surrey, send greeting.

WHEREAS I am in possession of an Invention for "IMPROVEMENTS IN THE MANUFACTURE OF CHEESE," and have petitioned Her most Excellent
10 Majesty Queen Victoria to grant unto me, my executors, administrators, and assigns, Her Royal Letters Patent for the same, and have made solemn Declaration that it has been communicated to me from

Bousfield's Improvements in the Manufacture of Cheese.

abroad by Henry Ogden Freeman, of Sherburne, in the State of New York, United States of America.

NOW KNOW YE, that I, the said George Tomlinson Bousfield, do hereby declare the nature of the said Invention to be as follows :—

The object of this Invention is to produce cheese of excellent quality 5
from materials of low cost. The materials which are used for the
purpose are skim milk and fat; and the Invention is based upon the
discovery that when fat is mixed with skim milk by the aid of heat, and
the emulsion so produced is treated with rennet or other suitable
coagulating substance, curd is obtained, which has the same richness as 10
curd produced from unskimmed milk, or from a mixture of such milk
and cream.

The fats which have been used with success in practicing this In-
vention are tallow, lard, and butter of a low grade, which in the vicinity
of cities is of less value than cream, or of butter of the best quality; and 15
the mode in which the Invention has been practiced with success is as
follows :—The skimmed milk is placed in the cheese vat in common use,
and heated to 98° or 100° Fahrenheit. The fat to be added is melted in
a separate vessel and then mixed with the milk at the above heat so as
to form an emulsion. 20

The emulsion is then constantly stirred while the heat is reduced to
about 84° F., at which temperature the rennet is added. The rennet
may however be added with the melted fat or at any period during the
cooling, but it is preferred to add it at about the above stated tem-
perature 84°, and it is important that the coagulation should be rapid 25
while the fat is thoroughly intermixed with the milk.

After the curd is produced the separation of it from the whey, and the
other operations required to produce cheese, are the same as the corre-
sponding operations practiced in manufacturing cheese in the ordinary
way. 30

The proportionate quantities of skim milk and fat which have been
used with success in practicing this Invention are fifteen pounds of fat
for every one thousand pounds of skim milk; but these proportions may
be varied as found expedient. It is also expedient to add to the milk
three ounces of saltpetre for every one thousand pounds of skimmed 35
milk.

Bousfield's Improvements in the Manufacture of Cheese.

I claim as the Invention the new manufacture of cheese herein-
before described by treating an emulsion of milk and fat with rennet or
other suitable coagulating substance substantially as before set forth.

5 In witness whereof, I, the said George Tomlinson Bousfield, have
hereunto set my hand and seal, this Fourteenth day of March,
in the year of our Lord One thousand eight hundred and seventy-
three.

GEO. T. BOUSFIELD. (L.S.)

LONDON:

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Printers to the Queen's most Excellent Majesty. 1873.